LISTING OF THE CLAIMS

This listing of claims will replace all prior versions, or listings, of claims in the application:

Listing of the claims:

1. (Previously presented) A peptide vector comprising a leader peptide, a linker DNA, and a desired nucleic acid sequence, wherein said linker DNA is double-stranded, and wherein only one strand of said linker DNA is covalently bound to said leader peptide, and wherein the leader peptide comprises SEQ ID NO:1 or a variant of SEQ ID NO:1 in which the amino acid residue at position 2 is isoleucine; position 4 is leucine; position 10 is arginine; position 11 is lysine; or position 13 is leucine, isoleucine, arginine, glutamine, asparagine or serine; or a combination of any of the foregoing.

2. (Canceled)

3. (Previously presented) The peptide vector according to claim 1, wherein the linker DNA comprises SEQ ID NO:2 and SEQ ID NO:3.

4. (Previously presented) A peptide vector comprising a peptide having the sequence shown in SEQ ID NO:1, or a variant of SEQ ID NO:1 in which the amino acid residue at position 2 is isoleucine; position 4 is leucine; position 10 is arginine; position 11 is lysine; or position 13 is leucine, isoleucine, arginine, glutamine, asparagine or serine; or a combination of any of the foregoing, a DNA having the sequence shown in SEQ ID NO:2, and a DNA having the sequence shown in SEQ ID NO:3.

5. (Previously presented) A method of producing a peptide vector comprising: covalently linking a peptide having the sequence shown in SEQ ID NO:1 or a variant of SEQ ID NO:1 in which the amino acid residue at position 2 is isoleucine; position 4 is leucine; position 10 is arginine; position 11 is lysine; or position 13 is leucine, isoleucine, arginine, glutamine, asparagine or serine; or a combination of any of the foregoing; and a DNA having the sequence shown in SEQ ID NO:2; and hybridizing a nucleic acid having the DNA sequence shown in SEQ ID NO:3 to a nucleic acid having the DNA sequence shown in SEQ ID NO:2.

6. (Currently amended) A method of introducing and expressing in a target cell *in vitro* a desired nucleic acid sequence comprising infecting said target ~~cells~~ cell with a peptide vector which comprises a leader peptide, a linker DNA, and a desired nucleic acid sequence, wherein said linker DNA is double-stranded, and wherein only one strand of said linker DNA is covalently bound to said leader peptide, and wherein the leader peptide

comprises SEQ ID NO:1 or a variant of SEQ ID NO:1 in which the amino acid residue at position 2 is isoleucine; position 4 is leucine; position 10 is arginine; position 11 is lysine; or position 13 is leucine, isoleucine, arginine, glutamine, asparagine or serine; or a combination of any of the foregoing.

7. (Canceled).

8. (Previously presented) The method according to claim 6, wherein the linker DNA comprises a DNA having the sequence shown in SEQ ID NO:2, and a DNA having the sequence shown in SEQ ID NO:3.